

METHODS AND SYSTEMS FOR CAPACITIVE
MOTION SENSING AND POSITION CONTROL

ABSTRACT OF THE DISCLOSURE

5 A system for detecting motion and proximity by determining capacitance between a sensor and an object. The sensor includes sensing surfaces made of a thin film of electrically conductive material mounted on a non-conductive surface. In another embodiment, the sensor is a human body. The sensor senses the capacitance between a sensor's surface and an object in its vicinity and provides the capacitance to a control system that directs machine movement. Because the sensor does not require direct contact or line-of-sight with the object, a machine can be controlled before harm occurs to the object.